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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,194	06/30/2005	Bertus Noordam	4662-45	8070

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EXAMINER	
LAU, JONATHAN S	

ART UNIT	PAPER NUMBER
1623	

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05/17/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,194	NOORDAM ET AL.	
	Examiner	Art Unit	
	Jonathan S. Lau	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 Feb 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-15 and 20-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-15 and 20-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1 pg / 18 Feb 2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 18 Feb 2010 has been entered.

This Office Action is responsive to Applicant's Amendment and Remarks, filed 18 Feb 2010, in which claims 6, 20 and 30 are amended to change the scope and breadth of the claim.

This application is the national stage entry of PCT/EP04/00658, filed 23 Jan 2004; and claims benefit of foreign priority document EPO 03075255.4, filed 27 Jan 2003. The foreign priority document is in English.

Claims 6-15 and 20-30 are pending in the current application.

Rejections Withdrawn

Applicant's Amendment, filed 18 Feb 2010, with respect to claims 6, 8-11 and 13 and 20-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Tanekawa et al.

(US Patent 4,303,680, issued 1 Dec 1981, of record) in view of Keller et al. (US Patent 4,623,723, issued 18 Nov 1986, of record) and in view of Amersham Biosciences (Gel Filtration: Principles and Methods, 2002, Amersham Biosciences, p1-34, of record) and in view of Chae et al. (Bioresource Technology, 2001, 76, p253-258, of record), with evidence provided by Kanegae et al. (US Patent 4,810,509, issued 7 Mar 1989, of record) has been fully considered and is persuasive, as amended claims 6 and 20 recite a separate step of separating solid material originating from the microbial cells from soluble material present in the released cell content.

This rejection has been **withdrawn**.

Applicant's Amendment, filed 18 Feb 2010, with respect to claims 12 and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record) in view of Keller et al. (US Patent 4,623,723, issued 18 Nov 1986, of record) and in view of Amersham Biosciences (Gel Filtration: Principles and Methods, 2002, Amersham Biosciences, p1-34, of record) and in view of Chae et al. (Bioresource Technology, 2001, 76, p253-258, of record) as applied to claims 6, 8-11, 13 and 20-29, and further in view of Fernandez et al. (Acta Biotechnol., 1992, 12(1), p49-56, of record) has been fully considered and is persuasive, as amended claims 6, 20 and 30 recite a separate step of separating solid material originating from the microbial cells from soluble material present in the released cell content.

This rejection has been **withdrawn**.

Applicant's Amendment, filed 18 Feb 2010, with respect to claims 6, 14 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record) in view of Keller et al. (US Patent 4,623,723, issued 18 Nov 1986, of record) and in view of Amersham Biosciences (Gel Filtration: Principles and Methods, 2002, Amersham Biosciences, p1-34, of record) and in view of Chae et al. (Bioresource Technology, 2001, 76, p253-258, of record) as applied to claims 6, 8-11, 13 and 20-29, and further in view of Tsuda et al. (US Patent 4,374,981, issued 22 Feb 1983, of record) has been fully considered and is persuasive, as amended claims 6 and 20 recite a separate step of separating solid material originating from the microbial cells from soluble material present in the released cell content.

This rejection has been **withdrawn**.

Applicant's Amendment, filed 18 Feb 2010, with respect to claims 6, 7 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record) in view of Keller et al. (US Patent 4,623,723, issued 18 Nov 1986, of record) and in view of Amersham Biosciences (Gel Filtration: Principles and Methods, 2002, Amersham Biosciences, p1-34, of record) and in view of Chae et al. (Bioresource Technology, 2001, 76, p253-258, of record) as applied to claims 6, 8-11, 13 and 20-29 above, and further in view of Potman et al. (US Patent 5,288,509, issued 22 Feb 1994, of record) has been fully considered and is

persuasive, as amended claims 6 and 20 recite a separate step of separating solid material originating from the microbial cells from soluble material present in the released cell content.

This rejection has been **withdrawn**.

The following are new grounds of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Amended Claims 6, 8-11, 13, 24 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halasz et al. (Use of Yeast Biomass in Food Production,

1991, CRC Press, p115-127 and 294-295, cited in PTO-892) in view of Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record).

Halasz et al. teaches the biomass of yeast can be use in different forms such as the extraction of components after disruption of the cell, separation and concentration of proteins and/or other components to produce concentrates and isolates (page 115, paragraph 1). Halasz et al. teaches the principle methods for rupturing cell walls are mechanical, disruption such as by chemical treatment and enzymatic digestion (page 115, paragraph 4 and table 42 at top of page 116). Halasz et al. teaches the principal steps of refining the extract of disintegrated yeast cells is by removing insoluble components such as from the cell wall followed by separation the nucleic acids and inorganics from the proteins by precipitation (figure 36 at top of page 125). Halasz et al. teaches removing insoluble components such as from the cell wall is accomplished by centrifuging (figure 35 at top of page 124). Halasz et al. teaches the a method of reducing nucleic acid content from the protein includes extraction of nucleic acids from protein with inorganic salts (table 45 at top of page 129). Halasz et al. teaches the production of low-RNA protein preparations gives a desirable byproduct of nucleic acids and nucleotides (page 294, paragraph 5) such as the preferred ribonucleotides IMP and GMP (page 295, paragraph 3).

Halasz et al. does not specifically disclose separating the RNA present in the release cell contents from other soluble cell material smaller than 50 kDa wherein the other soluble cell material comprises peptides and small proteins or the step of converting the separated RNA into 5'-ribonucleotides (instant claims 6 and 20). Halasz

et al. does not specifically teach the process wherein the separated RNA is enzymatically converted into 5'-ribonucleotides (instant claim 14). Halasz et al. does not specifically teach the method wherein the composition comprises more 5'-GMP than the sum of 5'-IMP and 5'-AMP (instant claim 24). Halasz et al. does not specifically teach the process wherein the separated RNA is enzymatically converted into 5'-ribonucleotides by 5'-phosphodiesterase (instant claim 26) and deaminase (instant claim 27). Halasz et al. does not specifically teach the process wherein the microbial cells are *Saccharomyces cerevisiae* (instant claim 29).

Tanekawa et al. teaches a process for producing a flavoring composition containing 5'-ribonucleotides (column 2, lines 9-10) by extracting RNA from yeast and enzymatically treating said RNA with 5'-phosphodiesterase and an AMP deaminase to give the 5'-ribonucleotides (column 2, lines 15-25). Tanekawa et al. discloses the preferred yeast cells are *Saccharomyces cerevisiae* (column 3, lines 4-5). Tanekawa et al. discloses an example in which the composition produced comprises more 5'-GMP (0.78%) than the sum of 5'-IMP and 5'-AMP, enzymatically converted to 5'-IMP (0.7 %) (column 7, lines 38-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Halasz et al. in view of Tanekawa et al. One of ordinary skill in the art would have been motivated to combine Halasz et al. in view of Tanekawa et al. because both Halasz et al. and Tanekawa et al. teach the desirability of ribonucleotides GMP and IMP extracted from yeast for producing a flavoring composition, Halasz et al. suggests methods of extracting nucleic acids in the form of RNA from yeast and

Tanekawa et al. teaches methods of producing said flavoring composition containing the 5'-ribonucleotides GMP and IMP. Halasz et al. does not specifically disclose separating the RNA present in the release cell contents from other soluble cell material smaller than 50 kDa wherein the other soluble cell material comprises peptides and small proteins, however Halasz et al. teaches the separation of protein from nucleic acids to give separately refined products (figure 36 at top of page 125) and suggests the desirability of producing concentrates and isolates of either nucleic acids or proteins. It would have been obvious to one of ordinary skill in the art to perform a method comprising separating the RNA present in the release cell contents from other soluble cell material smaller than 50 kDa wherein the other soluble cell material comprises peptides and small proteins as part of separating the RNA present from all other soluble peptides and small proteins. One of ordinary skill in the art would have a reasonable expectation of success in combining Halasz et al. in view of Tanekawa et al. because Tanekawa et al. also suggests separating the RNA from the insoluble residue which is mainly cell walls of yeast (column 4, lines 10-20).

Response to Applicant's Remarks:

Applicant's Remarks, filed 18 Feb 2010, have been fully considered and not found to be persuasive.

Applicant remarks regarding Tanekawa et al. is drawn to a single separation the RNA from the cell contents are moot in view of new grounds of rejection over Halasz et al. in view of Tanekawa et al. Halasz et al. teaches the principal steps of refining the extract of disintegrated yeast cells is by removing insoluble components such as from

the cell wall followed by separation the nucleic acids and inorganics from the proteins by precipitation (figure 36 at top of page 125), two separations steps corresponding to steps (ii) and (iii) recited in instant claim 6. As discussed above, one of ordinary skill in the art would have a reasonable expectation of success in combining Halasz et al. in view of Tanekawa et al. because Tanekawa et al. also suggests separating the RNA from the insoluble residue which is mainly cell walls of yeast (column 4, lines 10-20).

Amended Claims 7 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halasz et al. (Use of Yeast Biomass in Food Production, 1991, CRC Press, p115-127 and 294-295, cited in PTO-892) in view of Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record) as applied to claims 6, 8-11, 13, 24 and 26-29 above, and further in view of Potman et al. (US Patent 5,288,509, issued 22 Feb 1994, of record).

Halasz et al. in view of Tanekawa et al. teaches as above.

Halasz et al. in view of Tanekawa et al. does not specifically teach the process wherein the native enzymes of the cell are inactivated prior to treating the cells to release the cell contents (instant claim 7). Halasz et al. in view of Tanekawa et al. does not specifically teach the process wherein the cells are treated with a protease (instant claim 25).

Potman et al. teaches the process for preparing a yeast extract useful as a food flavor (abstract), involving the deactivation of the native enzymes of the yeast to remove

5'-GMP degrading activity (column 2, lines 30-36) prior to the enzymatic degradation of the cell with a protease such as papain (example 1 at column 5, lines 6-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Halasz et al. in view of Tanekawa et al. and further in view of Potman et al. One of ordinary skill in the art would have been motivated to combine Halasz et al. in view of Tanekawa et al. and further in view of Potman et al. because Halasz et al. in view of Tanekawa et al. teaches the desirability of IMP and GMP in the yeast extract useful as a food flavor and Potman et al. teaches deactivation of the native enzymes of the yeast removes 5'-GMP degrading activity. One of ordinary skill in the art would have a reasonable expectation of success to combine Halasz et al. in view of Tanekawa et al. and further in view of Potman et al. because all of Halasz et al., Tanekawa et al. and Potman et al. are drawn to preparing a yeast extract useful as a food flavor and the use of enzymatic degradation of the cell to release the cell contents.

Response to Applicant's Remarks:

Applicant's Remarks, filed 18 Feb 2010, have been fully considered and not found to be persuasive.

Applicant remarks regarding Tanekawa et al. is drawn to a single separation the RNA from the cell contents are moot in view of new grounds of rejection. As discussed above, one of ordinary skill in the art would have a reasonable expectation of success in combining Halasz et al. in view of Tanekawa et al. because Tanekawa et al. also suggests separating the RNA from the insoluble residue which is mainly cell walls of yeast (column 4, lines 10-20).

Amended Claims 12 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halasz et al. (Use of Yeast Biomass in Food Production, 1991, CRC Press, p115-127 and 294-295, cited in PTO-892) in view of Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record) as applied to claims 6, 8-11, 13, 24 and 26-29 above, and further in view of Fernandez et al. (Acta Biotechnol., 1992, 12(1), p49-56, of record).

Halasz et al. in view of Tanekawa et al. teaches as above.

Halasz et al. in view of Tanekawa et al. does not specifically teach the process comprising separating the RNA present in the released cell contents from other soluble cell material smaller than 50 kDa by ultrafiltration with a filter and the RNA is recovered in the filter's retentate (instant claim 12).

Fernandez et al. teaches separation by precipitation and ultrafiltration are known in the prior art as equivalent processes for the same purpose of purification of intracellular components and teaches ultrafiltration is advantageous because it avoids high temperatures or physicochemical changes that may alter the desired properties (page 49, paragraph 1 of Introduction). Fernandez et al. teaches concentrating and purifying RNA from cell extracts containing nucleic acids (page 49, paragraph 3 of Introduction) by ultrafiltration with hollow fiber membranes PM-10 and PM-30, or a filter having a molecular weight cut off of 10 or 30 kDa (page 50, paragraph 1 of section Ultrafiltration and paragraphs 1 and 2 of section Membrane Selection), implicitly

separating the RNA present in the released cell contents from other soluble cell material smaller than 10 or 30 kDa for recovery in the retentate.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Halasz et al. in view of Tanekawa et al. further in view of Fernandez et al. One of ordinary skill in the art would have been motivated to combine Halasz et al. in view of Tanekawa et al. further in view of Fernandez et al. because Fernandez et al. teaches separation by ultrafiltration is advantageous because it avoids high temperatures or physicochemical changes that may alter the desired properties. One of ordinary skill in the art would have had a reasonable expectation of success to combine Halasz et al. in view of Tanekawa et al. further in view of Fernandez et al. because Fernandez et al. teaches separation by separation by precipitation and ultrafiltration are known in the prior art as equivalent processes and Halasz et al. in view of Tanekawa et al. teaches separation of RNA by precipitation.

Response to Applicant's Remarks:

Applicant's Remarks, filed 18 Feb 2010, have been fully considered and not found to be persuasive.

Applicant remarks regarding Tanekawa et al. is drawn to a single separation the RNA from the cell contents are moot in view of new grounds of rejection. As discussed above, one of ordinary skill in the art would have a reasonable expectation of success in combining Halasz et al. in view of Tanekawa et al. because Tanekawa et al. also suggests separating the RNA from the insoluble residue which is mainly cell walls of yeast (column 4, lines 10-20).

Amended Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halasz et al. (Use of Yeast Biomass in Food Production, 1991, CRC Press, p115-127 and 294-295, cited in PTO-892) in view of Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record) as applied to claims 6, 8-11, 13, 24 and 26-29 above, and further in view of Tsuda et al. (US Patent 4,374,981, issued 22 Feb 1983, of record).

Halasz et al. in view of Tanekawa et al. teaches as above.

Halasz et al. in view of Tanekawa et al. does not specifically teach the process wherein the 5'-ribonucleotides are further purified by removal of compounds having a higher molecular weight (instant claim 14) by ultrafiltration (instant claim 15).

Tsuda et al. discloses the separation of inosine and/or guanosine by ultrafiltration of fermentation broth to remove high molecular weight substances (Tsuda et al. column 2, lines 9-15). Tsuda et al. teaches ultrafiltration is a useful method to remove both suspended solids and also soluble, high molecular weight contaminants (Tsuda et al. column 1, lines 19-30). Tsuda et al. teaches that ultrafiltration is a useful method for separating inosine and guanosine, useful as starting substances for a flavor nucleotide, from a fermentation broth, or cellular extract, containing such substances (Tsuda et al. column 1, lines 35-39).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Halasz et al. in view of Tanekawa et al. and further in view of Tsuda et al. It would have been obvious to improve the invention of Halasz et al. in

view of Tanekawa et al. by using the prior art technique of Tsuda et al. to improve a similar method would have been obvious to one of ordinary skill in the art at the time of the invention. One of ordinary skill in the art could have applied the known improvement of Tsuda et al. with predictable results because the nucleotide taught by Halasz et al. in view of Tanekawa et al. is a nucleoside that is phosphorylated and has a similarly low molecular weight compared to high molecular weight contaminants.

Response to Applicant's Remarks:

Applicant's Remarks, filed 18 Feb 2010, have been fully considered and not found to be persuasive.

Applicant remarks regarding Tanekawa et al. is drawn to a single separation the RNA from the cell contents are moot in view of new grounds of rejection. As discussed above, one of ordinary skill in the art would have a reasonable expectation of success in combining Halasz et al. in view of Tanekawa et al. because Tanekawa et al. also suggests separating the RNA from the insoluble residue which is mainly cell walls of yeast (column 4, lines 10-20).

Amended Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halasz et al. (Use of Yeast Biomass in Food Production, 1991, CRC Press, p115-127 and 294-295, cited in PTO-892) in view of Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record) as applied to claims 6, 8-11, 13, 24 and 26-29 above, and further in view of Keller et al. (US Patent 4,623,723, issued 18 Nov 1986, of record).

Halasz et al. in view of Tanekawa et al. teaches as above.

Halasz et al. in view of Tanekawa et al. does not disclose the process wherein the process produces a composition containing at least 55% w/w of 5'-ribonucleotides (instant claim 20), at least 65% w/w of 5'-ribonucleotides (instant claim 21) or at least 75% w/w of 5'-ribonucleotides (instant claim 22).

Keller et al. teaches 5'-ribonucleotides used as foodstuff additives are obtained by treating the aqueous cell extracts containing nucleic acids with 5'-phosphodiesterase (column 1, lines 18-27). Keller et al. teaches it is desirable to produce a composition of pure RNA (column 1, lines 25-30). Keller et al. teaches the isolation of the RNA (Keller et al. column 2, lines 45-49) suggesting producing a composition that is 100% 5'-ribonucleotides.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Halasz et al. in view of Tanekawa et al. further in view of Keller et al. One of ordinary skill in the art would have been motivated to combine Halasz et al. in view of Tanekawa et al. further in view of Keller et al. because Keller et al. teaches it is desirable to produce a composition of pure RNA in order to produce 5'-ribonucleotides used as foodstuff additives, suggesting producing a composition that is 100% 5'-ribonucleotides.

Response to Applicant's Remarks:

Applicant's Remarks, filed 18 Feb 2010, have been fully considered and not found to be persuasive.

Applicant remarks regarding Tanekawa et al. is drawn to a single separation the RNA from the cell contents are moot in view of new grounds of rejection. As discussed above, one of ordinary skill in the art would have a reasonable expectation of success in combining Halasz et al. in view of Tanekawa et al. because Tanekawa et al. also suggests separating the RNA from the insoluble residue which is mainly cell walls of yeast (column 4, lines 10-20).

Amended Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Halasz et al. (Use of Yeast Biomass in Food Production, 1991, CRC Press, p115-127 and 294-295, cited in PTO-892) in view of Tanekawa et al. (US Patent 4,303,680, issued 1 Dec 1981, of record) as applied to claims 6, 8-11, 13, 24 and 26-29 above, and further in view of Chae et al. (Bioresource Technology, 2001, 76, p253-258, of record).

Halasz et al. in view of Tanekawa et al. teaches as above.

Halasz et al. in view of Tanekawa et al. does not disclose the process wherein the composition comprises 0.01 to 10% w/w glutamate (instant claim 23).

Chae et al. teaches a food-grade yeast extract comprising flavoring enhancers glutamic acid and ribonucleotides from RNA (page 254, left column, paragraph 2) prepared by a combination of protease, 5'-phosphodiesterase, and deaminase containing 25.9% amino acids on a solid weight basis (Chae et al. page 257, left column, lines 26-29 and 33-35), and the amino acids composition is 7.80% glutamic acid (Chae et al. page 257, right column, table 3, entry "Glutamic acid"), giving a composition that comprises 2.02% w/w of glutamate.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Halasz et al. in view of Tanekawa et al. further in view of Chae et al. One of ordinary skill in the art would have been motivated to combine Halasz et al. in view of Tanekawa et al. further in view of Chae et al. to give a food-grade yeast extract comprising flavoring enhancers glutamic acid and ribonucleotides from RNA because Halasz et al. teaches one of ordinary skill in the art recognizes that monosodium glutamate (MSG) is used a flavor enhancing agent in addition to nucleotides (Halasz et al. page 294, paragraph 7). One of ordinary skill in the art would have had a reasonable expectation of success to combine Halasz et al. in view of Tanekawa et al. further in view of Chae et al. because Chae et al. teaches the preparation of a food-grade yeast extract comprising flavoring enhancers glutamic acid and ribonucleotides from RNA that also contains 2.02% w/w of glutamate.

Response to Applicant's Remarks:

Applicant's Remarks, filed 18 Feb 2010, have been fully considered and not found to be persuasive.

Applicant remarks regarding Tanekawa et al. is drawn to a single separation the RNA from the cell contents are moot in view of new grounds of rejection. As discussed above, one of ordinary skill in the art would have a reasonable expectation of success in combining Halasz et al. in view of Tanekawa et al. because Tanekawa et al. also suggests separating the RNA from the insoluble residue which is mainly cell walls of yeast (column 4, lines 10-20).

Conclusion

No claim is found to be allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan S. Lau whose telephone number is 571-270-3531. The examiner can normally be reached on Monday - Thursday, 9 am - 4 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jonathan Lau
Patent Examiner
Art Unit 1623

/Shaojia Anna Jiang/
Supervisory Patent Examiner
Art Unit 1623